

Amendment under 37 CFR 1.111
Serial No. 10/685,790
Attorney Docket No. 032015

REMARKS

Claims 1 - 15 are pending in the present application. By this Amendment, claims 1 and 6 have each been amended and new claims 16 and 17 have been added. No new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated May 18, 2005.

Allowable Subject Matter:

Applicant gratefully acknowledges the indication in item 3 of the Action that claims 11-15 have been allowed.

As to the Merits:

As to the merits of this case, the Examiner sets forth the following rejection:

claims 1-10 stand rejected under 35 USC 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Liu et al. (U.S. Patent No. 6,117,345).

This rejection is respectfully traversed.

Independent claim 1, as amended, now calls for *forming a second antireflection film on the first antireflection film, the second antireflection film suppressing reflection in a countervailing interference mode, and made of a same material as the first antireflection film.*

Similarly, independent claim 6, as amended, now calls for *forming a second antireflection film having a second attenuation coefficient smaller than the first attenuation coefficient on the first antireflection film, the second antireflection film made of a same material as the first antireflection film.*

For example, in an embodiment of the present invention, both of a lower antireflection film 25 and an upper antireflection film 26 are made of SiN (page 8, lines 2-16). Further, it is described that the lower and upper antireflection films may be made of amorphous carbon in lines 7-8 on page 13. Still further, it is described that the lower and upper antireflection films may be made of SiON in lines 10-12 on page 13. It is believed that the amendments to claims 1 and 6 are clearly supported in these descriptions.

It is respectfully submitted that the applicant's admitted prior art (JP2000-195791) fails to disclose these features now set forth in independent claims 1 and 6, since according to JP2000-195791 a first ARC layer and a second ARC layer are made of different materials from each other.

Translation of a part, paragraphs [0048], [0049] and [0051], of JP2000-195791 regarding materials of the ARC layers is described below.

[0048]

In one embodiment, the first ARC layer consists of inorganic ARC, which operates in absorption mode. Inorganic ARC, for example, consists of dielectric ARC (DARC). In one embodiment, DARC consists of a silicon oxy-nitride. Other inorganic anti-reflecting material is also useful, which operate in absorption mode for a certain exposure wavelength.

[0049]

As another embodiment, the first ARC layer consists of organic ARC. It is desirable that the organic first ARC layer has larger k value than the second ARC layer. Moreover, the anti-reflecting material, which operates in absorption mode for a certain exposure wavelength and is stable in later processes, is useful.

[0051]

The second ARC layer 140, which is disposed under a resist 170 and over the first ARC layer 135, operates in countervailing interference mode. In one embodiment, the second ARC layer consists of organic ARC. Organic ARC such as BARL from Shipley is useful to form the second ARC layer. ... In the case where resist poisoning does not raise a problem, inorganic ARC is used as the second ARC layer.

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As such, it is respectfully submitted that JP2000-195791 fails to disclose or fairly suggest the features of claims 1 and 6 concerning *forming a second antireflection film on the first antireflection film, the second antireflection film suppressing reflection in a countervailing interference mode, and made of a same material as the first antireflection film and forming a second antireflection film having a second attenuation coefficient smaller than the first attenuation coefficient on the first antireflection film, the second antireflection film made of a same material as the first antireflection film*, respectively.

In addition, it is submitted that Liu et al. fails to disclose or fairly suggest the above-noted drawbacks and deficiencies of JP2000-195791.

In view of the aforementioned amendments and accompanying remarks, Applicant submits that the claims, as herein amended, are in condition for allowance. Applicant requests such action at an early date.

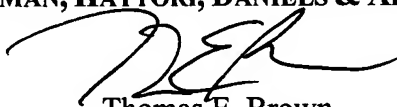
If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicant's undersigned attorney to arrange for an interview to expedite the disposition of this case.

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If this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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